U.S. BUREAU OF RECLAMATION

MID-PACIFIC REGION NORTHERN CALIFORNIA AREA OFFICE TRINITY RIVER RESTORATION PROGRAM WEAVERVILLE, CALIFORNIA

FINDING OF NO SIGNIFICANT IMPACT

In accordance with the National Environmental Policy Act of 1969 (NEPA), as amended, and with the Council on Environmental Quality's Regulations for Implementing the Procedural Provisions of NEPA (40 CFR Parts 1500-1508), the Trinity River Restoration Program (TRRP) office of the U.S. Bureau of Reclamation (Reclamation) has found that the Proposed Project, supported by the Trinity River Channel Rehabilitation Sites: Lower Steiner Flat (River Mile 90.2-91.3) and Upper Junction City (River Mile 79.8-80.4) Environmental Assessment/Initial Study (EA/IS), will result in no significant impacts on the human environment considering the context and intensity of impacts.

Supporting documentation in the EA/IS was prepared to meet the requirements of NEPA as well as the California Environmental Quality Act (CEQA). The EA/IS is tiered to the Trinity River Mainstem Fishery Restoration Program Environmental Impact Statement (EIS) and Channel Rehabilitation and Sediment Management Activities for Remaining Phase 1 and Phase 2 Sites, Part 1: Final Master Environmental Impact Report (Master EIR). Much of the impact analysis for the Lower Steiner Flat and Upper Junction City Rehabilitation Sites Project is discussed in the Master EIR.

Environmental review by:		
of Frank Herry	<u>.</u>	- May 30, 2012
F. Brandt Gutermuth Environmental Scientist,	7	Date
Trinity River Restoration Program	•	

Approved by:

Robin M. Schrock Executive Director.

Trinity River Restoration Program, Lead Agency

FONSI No.TR-EA 0212

FONSI No. DOI-BLM-CA-N060-2012-069-EA

Jennifer L. Mata Field Manager, Redding Field Office

Bureau of Land Management (BLM), Co-lead Agency

Date

This decision is made only for authorization pursuant to BLM Authority

FINDING OF NO SIGNIFICANT IMPACT

Trinity River Channel Rehabilitation Sites: Lower Steiner Flat (River Mile 90.2-91.3) and Upper Junction City (River Mile 79.8-80.4)

LEAD AGENCY

U.S. Bureau of Reclamation Trinity River Restoration Program P.O. Box 1300 1313 South Main Street Weaverville, CA 96093 Phone: 530-623-1800

Fax: 530-623-5944 Email: rschrock@usbr.gov

BACKGROUND AND NEED

Completion of the Trinity and Lewiston Dams in 1964 blocked migratory fish access to habitat upstream of Lewiston Dam, eliminated coarse sediment transport from over 700 square miles of the upper watershed, and restricted anadromous fish populations to the remaining habitat below Lewiston Dam. Trans-basin diversions from Lewiston Lake to the Sacramento River basin altered the hydrologic regime of the Trinity River, diminishing annual flows by up to 90 percent. Consequences of diminished flows included encroachment of riparian vegetation, establishment of riparian berms, ¹ and fossilization of point bars at various locations along the river, as far downstream as the North Fork Trinity River. These geomorphic changes resulted in a decrease in the diversity of species and age classes of riparian vegetation along the river, impaired floodplain access, and adversely affected fish habitat.

In 1994, the U.S. Fish and Wildlife Service (USFWS) as the NEPA lead agency began the NEPA process for developing the Trinity River Mainstem Fishery Restoration Environmental Impact Statement (EIS). The 2000 Record of Decision (ROD) for the Trinity River Mainstem Fishery Restoration Final Environmental Impact Statement/Environmental Impact Report (FEIS/EIR) directed Department of the Interior agencies to implement the Flow Evaluation Alternative as the Preferred Alternative identified in the FEIS/EIR to restore the Trinity River's anadromous fishery. The ROD directed the U.S. Bureau of Reclamation (Reclamation), through the Trinity River Restoration Program (TRRP), to restore the Trinity River fishery by implementing a combination of higher releases from Lewiston Dam (up to 11,000 cubic feet per second [cfs]), floodplain infrastructure improvements, channel rehabilitation projects, fine and coarse sediment management, watershed restoration, and an Adaptive Environmental Assessment and Management Program. The FEIS functions as project-level guidance for policy decisions associated with managing Trinity River flows and as a programmatic NEPA document providing first-tier support of related mechanical restoration and sediment management actions.

The TRRP, acting under the guidance of the Trinity Management Council (TMC), provides overall program direction to restore, enhance, and conserve the natural production of anadromous fisheries, native plant communities, and associated wildlife resources of the Trinity River basin. The TRRP provides technical and administrative support to the TMC related to both scientific evaluation of restoration progress and management implementation. The TRRP is responsible for the overall implementation of the ROD. The Lower Steiner Flat and Upper Junction City Rehabilitation Sites Project

Lower Steiner Flat/ Upper Junction City Rehabilitation Sites FONSI

¹ The condition is not as extensive as early studies indicated (e.g., the Trinity River Flow Evaluation Final Report 1999).

("Proposed Project" or "Project) is part of the mechanical channel rehabilitation component of the ROD that is designed to create, restore, and enhance the full range of anadromous fish habitats in the Trinity River by restoring fluvial processes. Activities to restore fluvial processes include rescaling the river channel and floodplain and augmenting gravel at high-flow placement areas. Specifically, this project includes reducing riparian encroachment, large woody debris (LWD) placement, physical alteration of alluvial features (e.g., floodplains and side channels), construction of hydraulic structures (wood and log features), and removal/replacement of riparian vegetation at strategic locations. The Proposed Project also includes placement of skeletal bars (rock between 6" and 12" diameter) at Lower Steiner Flat, and skeletal bar / island complexes (rock between 6" and 24" in diameter for structural integrity and fines < ½" for vegetation growth) at Upper Junction City. These rehabilitation activities are expected to increase habitat suitability and availability for salmonids and other native fish and wildlife species during a wide range of river flow conditions.

PROPOSED PROJECT

The Proposed Project includes work at the Lower Steiner Flat Rehabilitation Site, work at the Upper Junction City Rehabilitation Site, and placement of excavated materials within the Lower Junction City Rehabilitation Site boundary. Activities at the Upper and Lower Junction City sites would begin in 2012. The activities at the Lower Steiner Flat Rehabilitation Site are proposed to occur in two phases; Phase A activities, covered by this Finding of No Significant Impact, are planned for 2012, and Phase B activities that may occur within the next five years pending additional NEPA analysis, preparation of a separate Finding of No Significant Impact for those activities and Decision Document.

The Lower Steiner Flat Rehabilitation Site is located on the Trinity River (RM 90.2-91.3) near Douglas City, California. The site is 21 miles downstream of Lewiston Dam and 4 miles downstream of the Douglas City Bridge. The Upper Junction City Rehabilitation Site is located adjacent to Junction City, California next to State Route-299 approximately 8 miles west of Weaverville, California. The rehabilitation site is located on the Trinity River (RM 79.8-80.4) upstream from the Dutch Creek Road Bridge. The Lower Junction City Rehabilitation Site, where some material excavated from the Upper Junction City site would be placed, is just north of the Upper Junction City site and downstream of Dutch Creek Road. Rehabilitation activities as described in the Master EIR, combined with ROD flow releases, are expected to contribute to the restoration of the Trinity River mainstem fishery. Implementing channel rehabilitation work at the Lower Steiner Flat and Upper Junction City Rehabilitation Sites would continue implementation of the ROD. Implementation of the Proposed Project would contribute to the restoration of aquatic habitat in the mainstem Trinity River through the development of properly functioning channel conditions.

The EA/IS for the project considered two alternatives: the No-Project Alternative and the Proposed Project Alternative. After inclusion of all mitigation measures (discussed in detail in Section 2.4.2.3 and Appendix A of the EA/IS), no significant impacts were determined for the Proposed Project pursuant to NEPA or CEQA. Details concerning these alternatives and other alternatives considered but not carried forward for evaluation are included in Chapter 2 of the EA/IS. The Proposed Project, described below, maximizes environmental benefits with less-than-significant environmental impacts and is preferred for implementation.

An interdisciplinary team of the TRRP identified discrete activity areas within the boundaries of the Lower Steiner Flat and Upper Junction City Rehabilitation Sites. Activity areas were identified based on the type of activity that would occur in a specific place and include in-channel, riverine, upland, construction staging, and roads. For each site, riverine activities are labeled with an R followed by the construction site number (e.g., R-1, R-2); upland activities are labeled with a U followed by the construction site number; in-channel work areas are identified with an IC; wetland/pond areas are identified with a W; temporary river crossings are identified with an X; staging/use areas are characterized with a C, roads are identified as existing or new. The TRRP has developed programmatic

objectives for channel rehabilitation projects, which are described in Chapter 2 of the EA/IS. Each activity area was established to meet a suite of specific objectives in conformance with the overall goals and objectives outlined for the TRRP. Ultimately, the goal of the channel rehabilitation efforts is to provide functional aquatic habitat for all life stages of anadromous salmonids over a range of flow conditions; to provide suitable salmonid rearing habitat, which is presently believed to be a limiting factor in the system; and to reestablish healthy alluvial river geomorphic processes, which will ultimately maintain high-quality salmonid habitat at a dynamic equilibrium. The activities proposed at the sites are summarized below; additional details are provided in Chapter 2 of the EA/IS.

Lower Steiner Flat Rehabilitation Site:

Work at the Lower Steiner Flat Rehabilitation Site is proposed to occur in two phases: Phase A in 2012 and Phase B within 5 years (Future Proposed). Phase A activities are presented first in this section.

Phase A

Low Flow Side Channels and Anabranches (IC-9, IC-10, and IC-12)

Low-flow side channels, separated from the main channel by either unvegetated medial bars or vegetated islands, would be created at this site. The term "low flow side channel" refers to any secondary channel occupied by water at low flow. This differs from an "anabranch" which refers to a low flow side channel that is separated from the main channel by a vegetated, stable island (as opposed to an unvegetated medial bar), and which maintains a separate channel even during high flow. All three anabranch elements (IC-9, IC-10, and IC-12) take advantage of a previously constructed side channel on the right bank. The existing channel is long, straight, and narrow compared with other sustainable low flow side channels in the Trinity River, and is currently only occupied at high flow. The design enhances the habitat value by directing a larger proportion of the flow into it, and providing more lateral connections. These actions would increase the quality, quantity, and frequency of the available rearing habitat.

High Flow Side Channels

The Proposed Project would retain some existing high flow side channel habitat on the right bank that currently provides low velocity refugia during high flows and helps to maintain alcoves. Two portions of the existing high flow side channel would be preserved, that which connects alcove IC-11 with the IC-12 anabranch and that which runs between the IC-15 and IC-16 alcoves.

Alcoves (IC-11, IC-15, and IC-16)

The Proposed Project includes three alcoves, which would provide high quality rearing habitat at the exits of side channels and high flow side channels. The first two proposed alcoves are at the downstream ends of anabranches, and the third (IC-16) is at the downstream end of the existing high flow side channel. Large wood would be placed strategically in the alcoves to provide cover and shade. High flow side channels associated with these alcoves would route water and scour the alcoves during high flow periods.

Berm and Vegetation Removal (R-5)

Riparian "berms"—sand-dominated features that have been colonized by dense vegetation such as alder, willow, and blackberry—have formed along portions of the Lower Steiner Flat reach, in part because of flow regulation. To allow for more dynamic alluvial features, it has been recommended that some riparian berms be removed. However, some riparian and herbaceous vegetation is important for providing cover and contributing to quality fish habitat by providing roughness, shade, and hydraulic complexity. The downstream berm removal element, R-5, occupies the upper half of an island element that would separate a low flow channel (IC-12) from the mainstem. Berm removal here would create an expansion zone and allow a portion of the island to evolve in response to high flows. The lower half of this island was not proposed for berm and vegetation removal to protect the existing resource.

Skeletal Bar Placement (IC-14)

This skeletal bar would create channel complexity, divert/maintain the thalweg along the left bank, and would provide some hydraulic control near side channels. The skeletal bar would also provide potential habitat for amphibians. Rock materials (approximately 6"-12" diameter) would be placed into the active channel to construct this feature.

Hydraulic Structures (IC-13)

Hvdraulic structures would be constructed of large wood and large rocks. This element would serve multiple complementary purposes: create local hydraulic complexity, initiate scour holes, help provide hydraulic control and compensate for the expansion scour at the entrances to side channels, and contribute to reach-scale hydraulic roughness and gravel retention.

Access Roads (C-6, C-7, C-8, C-10, C-11, and C-12) and Contractor Use Areas (C-3 and C-9)

Construction access roads and contractor use areas were located with the intent to minimize disturbance to existing resources as much as possible. There are six construction access roads and two contractor use areas located on river right. Construction of the IC-13 hydraulic structure would require in-channel work by multiple pieces of equipment. Access would be via the construction road network and contractor use areas. To the extent possible during construction the contractor would allow periodic daily access to the boat launch at the C-6 area, while maintaining safety requirements. Arrangements with the contractor at the "Chop Tree" boat launch within the upstream work area at Lower Steiner Flat would be made so that, to the extent possible, the ramp would be open early in the morning (before 7 am), and in the evening (after 7 pm). Other boat ramps in the area will remain open so that recreational access to the project reach will be maintained. The boat launch at Douglas City Campground will be open and the boat ramp at the Steiner Flat Feather edge area (SFF – as shown in Figure ES-1 from the Master EIR), at the first river access point downstream of Douglas City campground, will also be open during the work period. For safety reasons, the campground at Lower Steiner Flat would be closed during construction.

Upland Spoil Areas (U-2 and U-3)

Spoil areas were located to stay above the Maximum Fishery Flow (MFF) and the Federal Emergency Management Agency (FEMA) 100-year floodplain boundary. To the extent possible, existing trees would be retained and the spoil area footprint would be minimized. Excavated materials would be delivered to these locations from adjacent activity areas.

Phase B

The following are the proposed activities conducted under Phase B that would be fully analyzed in a future NEPA document and, if appropriate, covered by a separate Finding of No Significant Impact before a decision on these activities and Decision Record for Phase B approved.

Skeletal Bar (IC-2, IC-4, and IC-8)

Skeletal bars would create channel complexity, divert/maintain the thalweg along the left bank, and would provide some hydraulic control near side channels. The skeletal bars would provide potential habitat for amphibians. Rock materials (approximately 6"-12" diameter) would be placed into the active channel to construct these features.

Hydraulic Structures (IC-1, IC-3, IC-5, and IC-7)

These elements would serve multiple complementary purposes: create local hydraulic complexity, initiate scour holes, help provide hydraulic control and compensate for the expansion scour at the entrances to side channels, and contribute to reach-scale hydraulic roughness and gravel retention. In concept, the elements would be gravity structures and include a combination of large wood and large rocks harvested from within the Lower Steiner Flat reach or imported to the site.

Low-Flow Side Channel (IC-6)

The IC-6 low-flow side channel would be separated from the main channel and occupied by water at low flow. This would increase the quality, quantity, and frequency of available rearing habitat.

Berm and Vegetation Removal (R-1, R-2, R-4)

Elements R-1 and R-2 are proposed in the upper portion of the reach. The purpose of terrace lowering in these two upstream locations is to allow new surfaces to flood and create expansions and contractions during high flow. These elements are complemented with constructed point bars and hydraulic structures. The downstream berm removal design element (R-4) is associated with a low flow side channel. R-4 is a partial berm removal on the upper half of the island and is intended to allow a partial medial bar to evolve and flood. The lower portion of the island would not be disturbed.

Banks and Floodplain (R-3) (Overhanging Alder Cover)

The Proposed Project would pull some mature alders down and into the channel on river right to increase cover and complexity. The alders would remain with roots still in the bank and, in time, may become entrenched near where they are pulled in, and small accumulations of logs could form in this reach. Some would likely be transported downstream, where they could be trapped in other elements of the proposed design including the downstream IC-5 hydraulic structure.

Access Roads (C-5, C-6, and C-7) and Contractor Use Areas (C-2, C-3, C-4, and C-13)

Construction access roads and contractor use areas were located with the intent to minimize disturbance to existing resources as much as possible. There are three construction access roads and four contractor use areas proposed for use in Phase B. Construction of the proposed hydraulic structures would require in-channel work by multiple pieces of equipment. Access should be possible via the construction road network and contractor use areas. Tree thinning to emulate historic conditions with larger and fewer trees may be conducted in these areas as appropriate. Harvested trees would be used in hydraulic structure implementation or otherwise on site to increase soil moisture and to increase productivity. Trees on low angle slopes adjacent to contractor use areas may also be selectively thinned to enhance wildlife habitat conditions and to reduce potential fuels loading.

Upland Spoil Areas (U-1 and U-2)

Spoil areas were located to stay above the MFF and FEMA 100-year floodplain boundary and to protect existing trees and minimize the spoil area footprints as much as possible.

Temporary River Crossing (X-1, X-2, and X-3)

Two low water crossings (X-1 and X-2), are required to construct the project. A high temporary bridge crossing (X-3) would be the access route for delivery of all spoil material from the river left elements to the upstream right bank spoil area (U-2). All crossings would allow boat passage throughout the project.

Upper Junction City Rehabilitation Site:

Low Flow Side Channel Complex (R-5)

This element consists of a baseflow side channel that splits off from R-4 and ends in the R-6 alcove. The side channel would incorporate topographic and shoreline complexity, LWD, and riparian vegetation. The side channel would provide immediate fry rearing habitat and would serve as a flow conduit to connect the W-1 wetland with the mainstem channel at moderate and high flows, and as a water source to aid in establishing riparian vegetation in the R-8 floodplain.

Split Flow (R-4) and Constructed Island Complex (IC-1)

These elements are components of a baseflow split-flow area (R-4) around a mid-channel bar. The IC-1 island complex is designed as a geomorphic feature to constrict the mainstem channel and bifurcate flow into the new R-4 channel, creating a split flow condition. The island is designed with a large wood structure at the front end to steer flows and maintain the split flow channel. The downstream end of the island would taper downward in elevation and be constructed to provide hydraulic structure and an

effective growing medium for riparian vegetation establishment. These elements would provide additional shallow water, eddies, and shoreline with cover at baseflow. At increased discharges, more of the vegetated bar surface would become inundated creating additional rearing habitat.

Alcove (R-6)

This alcove is located at the downstream end of the R-5 side channel. The alcove would provide slow water habitat over a wide range of discharges.

Floodplain Bench and Bank Recontouring (R-7 and R-8)

This element is an excavated floodplain bench adjacent to the R-4 split flow and R-5 side channel. These benches provide an area for riparian planting, and a refuge for aquatic species at higher flow levels.

Bank Recontouring (R-9)

This feature is part of the R-11 side channel complex and is designed to support large wood placements for habitat development and geomorphic complexity. The bank recontouring would also be revegetated to build diversity and be utilized as habitat for juvenile salmonid rearing.

Floodplain Recontouring and Planting/Enhancement (R-10)

Earthwork in this area would be limited to excavation of several shallow swales oriented diagonally to the mainstem flow direction and parallel to the presumed direction of flow across the right overbank area during floods. The area would be planted with clumps or poles of willow, cottonwoods, or other riparian species and would improve riparian habitat for terrestrial species and provide improved aquatic habitat during high flow periods. The swales would serve as relatively moist, low-elevation surfaces for riparian establishment and represent topographic diversity that would contribute to overall ecosystem diversity.

Large Wood Hydraulic Structure (IC-3)

This element is a large wood structure located at the inlet to the R-11 side channel that would provide additional cover habitat. The IC-3 wood structure is intended to accelerate flow into the inlet to the R-11 side channel, thereby discouraging sediment deposition in the inlet area.

Skeletal Bar Complex (IC-4)

This feature would provide aquatic habitat along the left bank while pushing flows and causing scour along the right bank in the IC-5 forced meander. The skeletal bar complex would consist of a constructed floodplain/bar with an engineered wood structure at its upstream end. The area near the wood structure and along the existing left bank of the river would be approximately at or slightly higher than the elevation of the water surface at the design flow of 7,500 ft³/s. The constructed surface would be composed of a mixture of immobile boulders, cobble, and fines, and would be planted with riparian vegetation.

Forced Meander (IC-5)

The IC-5 forced meander is designed to work in concert with the IC-4 skeletal bar complex to create an additional meander in the channel's primary flow region (the thalweg). The IC-5 area would be excavated to the elevation of the existing streambed. The feature is expected to increase river sinuosity, hydraulic complexity, and habitat diversity.

Large Wood Hydraulic Structure (R-14)

This design element would split flow at higher discharge and maintain hydraulic conveyance in the R-4 split flow channel. This element would also help reduce energy loss on the existing river left floodplain surface while steering flow back to the mainstem and helping to maintain adult salmonid holding water.

Low Flow Side Channel Complex (R-11)

This element would consist of a baseflow side channel that incorporates topographic and shoreline complexity, LWD, and riparian vegetation. The R-11 side channel would provide immediate fry rearing

habitat. In addition, it would serve as a flow conduit to connect the W-4, W-5, and W-6 wetlands with the mainstem channel at moderate and high flows.

Surface Water Inlet (R-12)

This part of the R-5 side channel complex would allow groundwater infiltration into the side channel. This element would consist of excavating the existing floodplain material and replacing it with a matrix of coarse-gravels to create a permeable lens for subsurface infiltration from the R-4 split flow into the R-5 side channel during baseflow periods. At higher flows, of around 2,500 cfs, the water would over top this infiltration gallery and allow a controlled overflow through a notch like weir system. It is expected that the R-12 inlet would allow about six percent of the total flow into the side channel at river discharges of greater than 7,500 cfs. The R-12 feature would limit water conveyance at higher river stages in order to maintain low velocities in the side channel, which are preferred by juvenile salmonids, and to maintain stream power in the main channel where it is needed to maintain adult holding habitat.

Revegetation Area (R-13 and R-15)

These two floodplain areas would be planted with riparian and upland plantings. No excavation would occur as part of these revegetation design features.

Water Infiltration Area (R-16)

This area would be excavated and backfilled with permeable coarse sediment to create a region where water from the main channel would infiltrate into the subsurface. The infiltration area would convey subsurface flow into the W-1 pond and the R-5/R-6/R-8 side channel complex in order to maintain water quality in the pond and side channel during baseflow periods when no surface flow would enter.

Rearing Ponds (W-1, W-4, W-5, and W-6)

A total of four wetland elements would be associated with the R-5 and R-11 low flow side channels. Semi-perpendicular inlet/outlet areas are included in the design to divert and shear water from the side channel at base flow discharges into the pond for rearing habitat development. The rearing ponds would be approximately 4-6 feet deep and would have slow water habitat features including existing and developed riparian vegetation, large wood, slash, and whole trees. The ponds would provide slow backwater refugia and year round rearing habitat for juvenile salmonid species. Groundwater infiltration and surface water in-flow from the associated side channels would supply the ponds with a cold water environment. Existing tree/shrub canopy would be saved during construction to provide food sources, shade, and protection from predation. The ponds would contain deeper pools that have a connection to groundwater to supply needed cold water. Existing vegetative cover and re-vegetation planting would be incorporated into the ponds to enhance their productivity for rearing fish.

Construction Access Roads (C-1 through C-9, C-14, C-16, and C-17)

Within the project site, existing access roads would predominantly be utilized. Because scrapers would likely be utilized for excavation of channels and floodplains, these continuous loop haul roads would be essential for safety and efficiency. Post-project, access roads would be returned to pre-construction condition, decommissioned, or left as improved, according to landowner approval.

Contractor Use Areas (C-10 through C-12 and U-2)

Contractor areas are used for construction access, staging, stockpiling, gravel processing, mobilization, and other necessary construction activities. These areas are designated for support areas only and no excavation or fill would take place within these zones. The U-2 contractor use area is the only contractor use area designated in an upland, not riverine, area; consequently it is designated as a "U" contractor use area. Minor clearing, grading, shaping, or decommissioning may take place but would need to be approved by the project construction manager. Depending on landowner goals and objectives, each contractor use area may be improved back to pre-construction condition or decommissioned.

Upland Spoil Areas (U-1 and U-3 fin the Lower Junction City site boundary))

Upland spoil areas would be used for placement of excavated fill materials. Use of these upland areas away from the Trinity River riparian zone for placement of fill materials would not affect the 100 year floodplain inundation levels. Upon project completion these areas would be heavily seeded and mulched and would evolve into upland terraces. One upland spoil area (U-3) is located in the Lower Junction City Rehabilitation Site boundary and would be used as the primary spoiling area for all river right excavation. The U-3 area was proposed to minimize material hauling costs that would be required if river right excavated materials were to be hauled to river left upland areas. Movement of materials to river left would require double handling of excavated material as off-road dump trucks from the floodplain would need to transfer spoils to "road-worthy" vehicles for transport across the Dutch Creek Road Bridge. Additional traffic control and potential road maintenance costs could also be incurred during transfer to river left spoil areas. Impacts to trees and habitat would be minimized in upland construction.

Overall, the activities proposed for the Lower Steiner Flat and Upper Junction City rehabilitation sites are intended to emphasize reconnecting the river's floodplain with the river, establishing or expanding side-channel habitat, and enhancing the bed and banks of the Trinity River to promote well-distributed aquatic habitat (wetted edge habitat) over a range of flows. Collectively, these activities are intended to enhance aquatic habitat for anadromous fish under a range of flow conditions. Excavation activities associated with construction of the sites are expected to yield approximately 14,550 cubic yards from Phase A construction at Lower Steiner Flat, 17,115 cubic yards from Phase B construction at Lower Steiner Flat, and 43, 499 cubic yards from construction at Upper Junction City.

The Proposed Project meets the requirements of the Trinity River ROD, the Endangered Species Act (ESA), the Clean Water Act, NEPA, the Clean Air Act, the Wild and Scenic Rivers Act, the National Historic Preservation Act, and the Resource Management Plan for the Redding Field Office of the BLM as amended by the Northwest Forest Plan. The Riparian Revegetation Management Plan, prepared in cooperation with the California Department of Fish and Game, U.S. Army Corps of Engineers (USACE), and the Regional Water Quality Control Board – North Coast Region (Regional Water Board), will be implemented to ensure that riparian habitat (e.g., riparian vegetation) is restored in a manner (species and size classes) that supports the TRRP objective of restoring the form and function of an alluvial river over time. Implementation of the Riparian Revegetation Management Plan will also ensure that the State of California's requirement of "no net-loss of riparian habitat" is met through a 1:1 replacement of affected riparian habitat over time. Project monitoring requirements will allow critical evaluation in order to adjust future rehabilitation plans to incorporate those practices that perform best in the field. A comprehensive discussion of these rehabilitation site activities is provided in Chapter 2 of the Draft Master EIR.

FINDINGS

The No-Project Alternative and Proposed Project Alternative were evaluated in the EA/IS with respect to their impacts in the following issue areas: land use; geomorphic environment; water resources; water quality; fishery resources; vegetation, wildlife, and wetlands; recreation; socioeconomics; cultural resources; air quality; aesthetics; hazards and hazardous materials; noise; public services and utilities/energy; transportation/traffic circulation; environmental justice; and tribal trust. Based on the following summary of the implementation effects of the Proposed Project (as discussed fully in the EA/IS), implementation of the Proposed Project would result in no significant impacts to the quality of the human environment.

Land Use

The Proposed Project is located in Trinity County, California and would be consistent with Trinity County's General Plan and Zoning Ordinance, which provides development standards for land in Trinity County, including areas located within the Trinity River floodplain. Short-term land use impacts resulting from the Proposed Project would be minimal because of project design criteria that require maintenance of public and private access to the Trinity River, adjacent residents, and businesses.

Additionally, project implementation would not prevent existing land uses from continuing or impede future land uses. Therefore, the Proposed Project would not have a significant impact on land use.

Geology, Fluvial Geomorphology, and Soils

Implementation of the Proposed Project is consistent with the 10 healthy river attributes described in the Trinity River Flow Evaluation Study that provide a basis for the TRRP efforts to restore and enhance native fish and wildlife populations. Project construction activities and disturbance would increase the potential for short-term wind and water erosion. However, project implementation would include sediment and erosion control measures to reduce and avoid potential short-term construction impacts on soils. Therefore, the Proposed Project would not have significant impacts on geologic resources or processes.

Water Resources

Based on the USACE hydraulic model HEC-RAS, implementation of the Proposed Project, including excavation or placement of alluvial materials in the 100-year floodplain and low-flow channel, would not increase the base flood elevation of the Trinity River. Additionally, project implementation would not result in significant risk of injury, death or loss involving flooding or erosional processes. The proposed activities are expected to have minimal, if any, effects on groundwater elevations or groundwater quality. Therefore, the Proposed Project would not have a significant impact on water resources.

Water Quality

Implementation of the Proposed Project, including construction activities in and adjacent to the low-flow channel, could temporarily increase turbidity and total suspended solids in the water column. It could also result in a spill of hazardous materials (e.g., grease, solvents) into the Trinity River. Construction activities would be staged and timed to minimize potential water quality effects, and appropriate mitigation measures would be implemented to avoid and reduce water quality impacts. Therefore, the Proposed Project would not have a significant impact on water quality.

Fisheries Resources

To comply with Section 7 of the ESA, Reclamation initiated informal consultation with the National Marine Fisheries Service (NMFS) concerning project effects on the federally and state-listed (threatened) Southern Oregon/Northern California Coast (SONCC) evolutionarily significant unit (ESU) of coho salmon. NMFS affirmed that certain non-flow measures, including the mechanical rehabilitation and sediment management projects identified in the ROD, were considered in its 2000 Biological Opinion issued in response to the FEIS/EIR. In that Biological Opinion, NMFS identified implementation of mechanical rehabilitation projects as reasonable and prudent measures to minimize Trinity River Division effects on SONCC ESU coho salmon. Subsequent to the ROD, NMFS provided the TRRP with documentation necessary to ensure that the 2000 Biological Opinion did in fact consider the types of activities associated with the Proposed Project. Reclamation will continue to coordinate with NMFS as it implements the terms and conditions of the 2000 Biological Opinion.

Any temporary construction impacts on fish-rearing habitat are expected to be offset by permanent beneficial changes to physical rearing habitat associated with project implementation. Collective improvements in fluvial channel dynamics contributed by the Proposed Project in conjunction with future channel rehabilitation projects throughout the Trinity River between Lewiston Dam and the North Fork Trinity River are ultimately expected to improve rearing habitat diversity for all anadromous salmonids. Because of the Proposed Project's inclusion of mitigation measures to protect fishes and generally localized effects, no significant effects would occur to fisheries resources.

Vegetation, Wildlife, and Wetlands

Construction activities associated with the Proposed Project would result in a temporary loss of riparian vegetation, but the value provided by this vegetation would be offset by restoring floodplain function and riverine processes. Revegetation of alluvial features (i.e., floodplains) would increase structural and species diversity and would speed reestablishment of native riparian vegetation. Long-term changes in river inundation periods are expected to increase both seasonal and perennial riparian habitats.

Reclamation has conducted informal consultation with the USFWS concerning effects to the ESA-listed northern spotted owl (*Strix occidentalis caurina*). The Master EIR noted that northern spotted owl habitat does not exist in the project area. Habitat for northern spotted owl at Lower Steiner Flat was considered marginal for foraging with too few large trees and excessive undergrowth. However, because the habitat was considered adequate for dispersal, spotted owl surveys were conducted in 2011. No spotted owls were located as a result of those surveys. Based on the consultation, the known lack of suitable habitat and spotted owl nests in the area (nest data provided by the Shasta-Trinity National Forest), and Trinity River bird distribution data provided by the Forest Service's Redwood Sciences Laboratory, Reclamation determined that a biological assessment was not required because the project would have no effect on the northern spotted owl or its critical habitat.

Specific design and contract criteria are included in the project description to ensure that project activities occur in a manner that addresses potential impacts to special-status species, including avian and amphibian species. These activities and prescriptive measures, combined with rapid riparian revegetation rates, ensure that the Proposed Project will not result in significant project impacts to vegetation, wildlife, and wetlands. Because Dyer's woad – a weed of concern – was identified at the Upper Junction City site, additional measures were added to the Proposed Project to prevent spread of this species.

Recreation

The Trinity River was federally designated as a National Wild and Scenic River in 1981. Implementation of the Proposed Project would result in a long-term benefit to the form and function of the Trinity River, thereby enhancing the Outstandingly Remarkable Values for which it was designated as a Wild and Scenic River, including its anadromous fishery. Implementation of the Project would alter the riverine environment; however, construction under the Project would not permanently affect the scenic or recreational values of the Trinity River for which it was designated. Although the Proposed Project could result in limited temporary interruptions of public access and use, river access would continue to be available at a number of locations adjacent to the project sites. The boat launch at Douglas City Campground will be open and the boat ramp at the Steiner Flat Feather edge area (SFF – as shown in Figure ES-1 from the Master EIR), at the first river access point downstream of Douglas City campground, will also be open during the work period. Arrangements with the contractor at the "Chop Tree" boat launch within the upstream work area at Lower Steiner Flat would be made so that, to the extent possible, the ramp would be open early in the morning (before 7 am), and in the evening (after 7 pm). Because of the continued availability of river use and access, the generally localized effects, and inclusion of mitigation measures to protect recreationists, impacts on recreation resulting from project implementation would not be significant.

Socioeconomics, Population, and Housing

The Proposed Project could directly generate short-term income growth through the payment of wages and salaries, but would result in little increased long-term economic activity. Because of the limited project size and duration, there would be no significant impact on socioeconomic conditions, population, or housing.

Tribal Trust

TRRP's overarching goals of restoring, enhancing, and conserving the natural production of anadromous fisheries, native plant communities, associated wildlife resources, and overall health of the Trinity River basin are consistent with federal Tribal Trust responsibilities. The primary TRRP goals originate partly from the federal government's trust responsibility to protect fishing rights for ceremonial, subsistence, and commercial purposes of the region's Indian tribes. Several short-term impacts that would affect Tribal Trust assets are considered acceptable provided that long-term fishery and healthy river goals are supported. These impacts are generally associated with construction activities, which would temporarily affect fish and wildlife resources, vegetation, and water quality in the rehabilitation sites. Potential impacts on Tribal Trust assets would be avoided and minimized by project design criteria and mitigation measures provided to protect Tribal Trust assets. While some level of impact to fisheries and water quality cannot be avoided during construction activities, the impacts that would occur to these Tribal Trust assets would be kept at a less-than-significant level. Therefore, the Proposed Project would not have a significant impact on Tribal Trust assets.

Cultural Resources

Implementation of the Proposed Project would effectively avoid, minimize or mitigate impacts to cultural resources as described in the Programmatic Agreement (PA) executed between Reclamation and the State Historic Preservation Office in 2000. By following the stipulations of the PA, there would be no impacts to cultural resources and all actions under CEQA and the National Historic Preservation Act would be fulfilled. Reclamation commits to fulfilling the stipulations of the PA prior to implementation of the Proposed Project. If cultural materials or human remains are encountered during work for the project, construction would be halted and the proper agency contacted. Because of the pre-project cultural resource survey and mitigation measures to cover potential finds during construction, project impacts to cultural resources during implementation of the Proposed Project would not be significant.

Air Quality

Construction associated with the Proposed Project requires the use of equipment that would temporarily contribute to air pollution in the Trinity River basin in the form of ozone precursors, particulate matter (PM_{10}) , and greenhouse gas emissions. Because Reclamation would include provisions in construction contract documents that minimize construction-related impacts on air quality resulting from project activities, the Proposed Project would not result in a significant impact on air quality.

Environmental Justice

There is no evidence to suggest that the Proposed Project would cause a disproportionately high adverse human health or environmental effect on minority or low-income populations. The Proposed Project would not have a significant impact on environmental justice.

Aesthetics

Over the long-term, implementation of the Proposed Project is expected to complement the visual resources and aesthetic values of the project area by restoring the function and form typical of an alluvial river. Design of the Proposed Project incorporates the diversity of the landscape and vegetation types in the project vicinity into the character of the rehabilitated riverine and upland areas. Retention of existing topographic features would lessen the degree of visual impacts and improve the aesthetic quality of the affected reach of the Trinity River. Changes to the landscape would not be noticeable in the long term. Based on these findings, the Proposed Project would not have a significant impact on aesthetics.

Hazardous Materials

Implementation of the Proposed Project would potentially release hazardous materials through accidental spills that could pose a public hazard. However, Reclamation would ensure that the contractor follows

Best Management Practices to prevent the release of hazardous materials into the environment (e.g., oils, gasoline) and to provide adequate response measures in case a spill does occur. These practices would ensure that implementation of the Proposed Project would not have a significant impact with respect to hazardous materials.

Noise

Construction and traffic associated with the Proposed Project would generate noise. To minimize potential noise impacts, construction activities would be scheduled between 7:00 a.m. and 7:00 p.m. Monday through Saturday. Additional time constraints may be imposed for activities occurring immediately adjacent to residences. Gravel placement would use local topography to decrease the noise leaving the site. During working hours, Reclamation would ensure that the contractor operates all equipment to minimize noise impacts to nearby sensitive receptors (residences, etc.) so that no significant project impacts from noise would occur.

Public Services and Utilities/Energy

Construction work and temporary road closures would be staged in a manner to allow for access by emergency service providers. Therefore, no significant effects to public services would result from implementation of the Proposed Project.

Transportation/Traffic Circulation

Implementation of the Proposed Project would minimize the use of heavy construction equipment to transport material to and from the project work site. Equipment would be staged on site during construction. Since local roads are built to service occasional heavy equipment traffic, no measurable road wear would result from ingress or egress of construction equipment or during hauling of restoration materials to the site. For safety reasons, Reclamation would ensure that the contractor implements a traffic control plan to protect the public during construction. Implementation of these planning measures would ensure that no significant effects to traffic circulation would result from project implementation.

SUMMARY

Implementation of the Proposed Project, including mitigation measures, would contribute to the long-term environmental quality and sustainability of the Trinity River ecosystem with no significant adverse impacts to the environment.

FINDING OF NO SIGNIFICANT IMPACT IN ACCORDANCE WITH 40 CFR 1508.27

After considering the environmental effects described for the Proposed Project in the EA/IS for the Lower Steiner Flat and Upper Junction City Rehabilitation Sites, it has been determined that it will not have a significant effect on the quality of the human environment considering the context and intensity of impacts. Therefore, an environmental impact statement is not needed. This determination is based on the analysis in the EA/IS and the context and intensity of the following factors (40 CFR 1508.27):

- 1) There will be no significant effects, beneficial or adverse, resulting from implementation of this project. The finding is not biased by the beneficial effects of the action. The construction of the Proposed Project at the Lower Steiner Flat and Upper Junction City rehabilitation sites is expected to provide localized improvements in aquatic and riparian habitats currently present at the sites. The project will assist in meeting long-term needs to enhance fish habitat and provide properly functioning river conditions. Viewed within the context of a *healthy* Trinity River, and against implementing the larger river restoration program required under the ROD, this channel rehabilitation project will not result in any significant impacts.
- 2) **Public health and safety are not significantly affected by the project.** Due to the limited duration of the project and implementation of public safeguards, public safety will not be at risk. Standard

Reclamation practices for notifying the public of heavy equipment activities will be implemented during project activities.

- 3) There will be no significant adverse effects on prime farmlands, park lands, floodplains, wetlands, historic or cultural resources, scenic rivers, ecologically critical areas, civil rights, women, or minority groups. Although there will be no significant adverse effects in these areas, the project will result in a minor amount of disturbance to river attributes while enhancing the outstandingly remarkable value—the anadromous fishery—for which the river was designated in the Wild and Scenic River system. This project is programmatically tiered to the Trinity River Mainstem Fishery Restoration Program EIS, which recommended implementation of the six components of the ROD. The Proposed Project, which involves implementation of a subset of channel rehabilitation actions from the ROD, has no significant impacts within the context of the entire array of ROD restoration components.
- 4) Based on public participation and the involvement of resource specialists, effects of the Proposed Action on the quality of the human environment are not expected to be highly controversial. Preliminary designs for this project were first discussed with the public at an October 12, 2010 open house at the Douglas City School in Douglas City, California. Designs were again discussed at two public meetings held at the North Fork Grange Hall, in Junction City on February 11, 2011 and on July 27, 2011. In addition, TRRP staff has worked closely with the local Trinity River Guides Association (TRGA) to understand their concerns and to adjust the Proposed Project to alleviate these concerns where possible. TRRP staff have attended Trinity River fishing guide meetings and floated the river with individual guides in order to gain their project insights. Outreach to local mining groups with interest in the Lower Steiner Flat site has also been initiated. TRRP staff members will continue to meet with local groups (e.g., fishing guides and mining groups) and landowners from the Junction City and Douglas City areas, where the sites are located, in order to obtain stakeholder input and advice as well as to address concerns.

Reclamation (represented by members of the TRRP) held a public meeting on January 26, 2012 at the Douglas City Fire Station, in Douglas City, California. Approximately 20 members of the public attended the meeting and their inquiries focused on access to the Lower Steiner Flat boat ramp during construction (the "Chop Tree" ramp), concerns about introduction of small gravel (<4 inch diameter) into the river, and written documentation on the evaluation of the TRRP's Phase 1 projects. Notice of all public meetings, and other pertinent project information, was announced in the local Trinity Journal newspaper and posted on the TRRP's website.

The EA/IS was made available for public review when the document was submitted to the State Clearinghouse on February 17, 2012. The document was circulated to local, state, and federal agencies and to interested organizations and individuals for review and comment on the analysis provided in this document. The public scoping period ran for 30 days from February 17 to March 20, 2012. Concurrent with this review period, public notice was provided to solicit additional comments from the public and interested parties. Public notice included: advertisement(s) in the local Trinity Journal newspaper, letters mailed to local landowners, notices to email interest groups, and public notice posted at the project sites informing the public of the availability of the EA/IS for review.

As a result of the comments received during the public comment period a number of changes were made to the EA/IS. More information was added concerning mining, the presence/planned treatment of dyer's woad, a non-native species of concern in Trinity County, and river access during the proposed construction period. The public comments and TRRP's responses were added as Appendix B of the EA/IS. With input from technical staff from the lead, cooperating, and responsible agencies, environmental, social, and economic issues have been addressed such that this project should avoid major scientific controversy over environmental effects.

- 5) There are no known effects on the human environment that are highly uncertain or involve unique or unknown risks. The effects of the Proposed Project have been clearly evaluated in the EA/IS. Similar activities have been completed at past channel rehabilitation sites and collected data and analyses have determined that no adverse impacts to the human environment have resulted.
- 6) These actions do not set a precedent for other projects that may be implemented to meet the goals and objectives of the Trinity River Restoration Program. The Trinity River Mainstem Fishery Restoration EIS, the ROD, and the Trinity River Flow Evaluation Report all evaluated and recommended channel rehabilitation projects on the Trinity River below Lewiston Dam. The environmental effects of future projects will be analyzed based on need dictated by the ROD, but the need will be balanced by any new information collected during implementation of this project and other recently implemented projects.
- 7) There are no known significant cumulative effects from this project and other projects implemented or planned on areas separated from the affected area of this project beyond those assessed. While some short-term adverse direct and indirect effects may result from the project, these effects have been analyzed in the EA/IS, and will not lead to significant cumulative effects. Potentially significant long-term project effects from implementation of the ROD were evaluated in the Trinity River Mainstem Fishery Restoration EIS. When considered in the context of cumulative watershed effects, the project is intended to improve the alluvial processes and function of the mainstem Trinity River and at the same time improve the ability of the Trinity River to mobilize and transport sediment. Cumulative short-term impacts such as soil disturbance and turbidity would occur in response to the project, but not to an extent that would cause significant impacts to downstream water quality.
- 8) Based on surveys accomplished prior to this decision, this action will not adversely affect sites or structures eligible for the National Register of Historic Places, or cause loss or destruction of significant scientific, cultural, or historic resources. Based on project design and measures described in the EA/IS, the decision maker has determined that the project will not result in the destruction of scientific, cultural, or historic resources.
- 9) The project would not adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973. A biological opinion addressing foreseeable TRRP activities (National Marine Fisheries Service 2000) was written in response to a biological assessment that reflected the findings in the Trinity River Mainstem Fishery Restoration EIS. The opinion was written because Trinity River coho salmon are federally listed as threatened. The opinion describes adverse effects that could result from the channel rehabilitation measures that are included in the preferred alternative described in the EIS. Such adverse effects were determined to be minor and short-lived, dwarfed by the long-term beneficial outcome from implementing the Proposed Project.

Informal consultation with the USFWS concerning effects to the ESA-listed northern spotted owl was conducted by Reclamation. Based on this informal consultation, known lack of suitable habitat and spotted owl nests in the area (nest data provided by the U.S. Forest Service), and Trinity River bird distribution data provided by the Redwood Sciences Laboratory, Reclamation determined that a biological assessment was not required since the project would have no effect on the northern spotted owl or its critical habitat.

No federally or state-listed threatened or endangered plant species occur within or adjacent to the site boundaries defined for the project.

10) Implementation of the project does not threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment. Implementation of the Proposed Project does not threaten violation of any laws. Its implementation meets requirements under the

ROD, the ESA, the Clean Water Act, the Federal Land Protection and Management Act (FLPMA), NEPA, the Clean Air Act, the Wild and Scenic Rivers Act, the National Historic Preservation Act, and BLM's Resource Management Plan (RMP) for the Redding Field Office.

The project described in this finding is fully consistent with BLM's RMP, FLPMA, and CEQA. The following permits are required to authorize the project:

- Section 404, Clean Water Act, Nationwide Permit 27 (San Francisco District, U.S. Army Corps of Engineers),
- Section 401, Clean Water Act Water Quality Certification (Regional Water Quality Control Board – North Coast Region),
- Section 10, Endangered Species Act, Incidental Take Permit (National Marine Fisheries Service),
- Encroachment Permits (Trinity County or California Department of Transportation),
- Floodplain Development Permit (Trinity County).

Findings Required by Other Laws and Regulations

This decision to implement the rehabilitation activities, including those specifically under the jurisdiction of BLM, is consistent with the intent of the RMP with respect to resource management conditions. The project is also consistent with the direction provided in the BLM's Trinity River Recreation Area Management Plan.

Implementation Date

The Proposed Project is expected to be constructed in 2012 between July and December with revegetation to be conducted, as needed, in 2012 and spring of 2013.

Contact

For additional information concerning the overall decision to implement the Proposed Project, contact Brandt Gutermuth, Project Manager, Trinity River Restoration Program, P.O. Box 1300, and 1313 Main Street, Weaverville California, 96093.